Discussion: There is a feeling, current among Committee members, that this may not be the best proposal to overcome the present stagnation in Amateur Radio growth. Our recent spectrum loss and the ever-present spectre of other commercial interests coveting our space make it imperative that we expand our numbers and tighten our ranks to survive. On the other hand, the committee recognizes that the NPRM proposal is a gigantic step forward, which is long overdue. Any suggestions for modification must be consistent with FCC objectives, well documented, and must represent current thinking in the mainstream of the community.

- 1.1 Do you feel that we should let well enough alone?
- 1.2 Would you like to see one or more changes made?
- 1.3 Do you think that growth is necessary for the hobby to survive as we now know it?

<u>Discussion</u>: Radio amateurs have a long and outstanding history of service to the public. A 1986 FCC study suggests that the public may be disserved by the lack of amateur radio growth since amateur radio operators represent a significant public service and disaster relief communication capability.

- 2.1 What effect does requiring telegraphy proficiency have on the number of operators available for emergency communications.
- 2.2 To what extent is Morse code used during public service communications, particularly at the VHF and higher frequency range?

<u>Discussion:</u> A major activity in the amateur service appears to be totally recreational in nature. Included under this category are such activities as contesting, contacting far away lands and socializing with friends with similar interests. The elderly and the handicapped especially, derive pleasure and benefit from leisure communications.

3.1 What effect does the requirement for code have on this segment of the population?

<u>Discussion:</u> One petitioner (RM-6988) suggested eliminating the 20 wpm telegraphy examination. It appears most countries do not require high speed telegraphy capability for their highest amateur license class. Canada will only require 12 words-per-minute proficiency for their top license.

- 4.1 Would 5 WPM General Class telegraphy proficiency; with 13 WPM being required for the Extra Class be more in keeping with today's communications technology?
- 4.2 Would 5 WPM for Communicator operation on HF and 13 WPM for all other classes be a better choice?
- 4.3 Would elimination of the 20 WPM telegraphy examination ease the burden on the VEC program without negatively affecting the amateur service? What are the advantages, disadvantages?

<u>Discussion:</u> It has been suggested that the present licensing structure promotes class distinction within the

amateur ranks. The structure has evolved over a period of years in an attempt to solve the expansion problem with incentives. Clearly, this has been a failure. Having five classes of license is patently ridiculous. There is no justification in requirements, neither legal nor practical, that would lead one to invent such a system-from scratch.

- 5.1 Would a two class licensing system consisting of Communicator and Extra be an acceptable alternative? The Communicator would have all privileges above 50 MHz and would require 5 WPM for CW only operation on HF. The Extra class would have full privileges and would require 13 WPM. Existing licenses would maintain current privileges until upgraded.
- 5.2 Is there a compromise plan that would be more acceptable and yet reduce the number of license classes? Should there be?

<u>Discussion</u>: It has been said that the very idea of frequency and mode "privileges" based solely on "class" is contrary to our American sense of values. Such distinctions should be made on a technical basis and only when absolutely necessary for the common good. Examples of such allocations are sub-bands for repeater operation, beacons, satellite communications, etc.

- 6.1 "Class" in this context refers to privileges earned by completing more difficult examinations. Do you think the assessment really applies to our existing license structure?
- 6.2 Is there any part of this idea that you would support?

<u>Discussion</u>: The underlying principles expressed in the NPRM are that telegraphy is a barrier to newcomers entering the Amateur service; there is no international requirement for telegraphy above 30 MHz; that telegraphy has little or no application on these higher frequencies. Yet, the NPRM limits the new entry class to frequencies above 220 MHz and subjects the applicant to questions relating to telegraphy practices, HF propagation, etc., as a condition for obtaining a license.

- 7.1 Do you believe this is a significant problem with the proposal as written?
- 7.2 How would you rearrange the element content to overcome the problem stated in the discussion?

<u>Discussion:</u> Many Amateurs have expressed fear that elimination of the telegraphy requirements would open the door to the chaos exhibited in the CB Radio service. The implication being that the act of learning telegraphy automatically makes one a responsible citizen on the amateur bands. Others maintain that, whether code is required or not, the quality of citizenship on the bands will be unaffected. They claim that the problems originate in the society at large and that Amateur Radio is merely a reflection of that society.

8.1 Do you believe that there is merit in one or the other of these arguments?

I am a code enthusiast. Like the old Ivory soap commercials stated, I am at least 99 44/100 % pure. I average about 3500 contacts per year (including light contest activities), and most of my last 40 years on the amateur bands have been completely devoid of voice contacts. Despite my preference for code operation, I know that its years as a realistic amateur radio licensing requirement are coming to an end. The existing international rules state that anyone desiring to be licensed tooperate in amateur radio bands below 30 Megahertz must prove their abilities to receive the International Morse Code (by ear) and to send it (by hand). These code requirements are based on the nee for amateurs to be able to recognize distress, safety, and other critical communications being transmitted by code. Amateurs must be able to recognize such communications to avoid interfering with them. There is no other reason why amateur radio code tests are required internationally. In actual practice, the FCC does not meet the international code sending test requirement. When the Global Maritime Distress and Safety System is implemented during 1993, and becomes mandatory in 1999, the reason for requiring prospective amateurs to pass code tests will be eliminated. Code has inadvertently limited amateur radio to people who are sincerely interested in amateur radio, and who are willing to earn licenses. Thus, code has helped our Amateur Radio Service acquire only highly motivated people, which is to our benefit. I will miss the code as a licensing requirement for all amateurs. I have had many students develop a preference for code operation after initially hating (and fearing) code. I believe that very

few excellent code operators prefer any other mode of operation. During the time that code is being phased out of the maritime service (1993-1999), it should also be phased out as a test requirement for every type of amateur radio license. This time frame should be used to change our test requirements in ways that will guarantee that future licensees will have proven operating capabilities. The existing license structure requires drastic revision to meet the present needs of our Amateur Radio Service. Our future amateur radio operators' initial license should be available to authorize any desired mode of operation. These modes are code, facsimile, pulse, teletype, television, and voice. Due to current relatively low activity (compared to the other modes), facsimile and pulse could be combined to be considered a single mode when subsequently considering operating privileges (in this article). As an example of such licensing, if an aspiring amateur is initially interested in voice operation, her/his examination should consist of a written test and satisfactory on-the-air demonstrations of the candidate's knowledge of correct voice operating procedures (hf/vhf, fm/ssb). The written test administered to an unlicensed person should include questions about electronic fundamentals and FCC regulations which are common to all types of emissions. basic questions should be supplemented with questions about FCC regulations, theory, and operating procedures that are all directly related to the desired initial operating emission/mode privilege. After one obtains an amateur radio operator's license (or any mode), additional mode privileges could be earned by passing written and on-the-air operating tests that are directly

related to the desired additional emission/mode privilege being sought. Theory and FCC questions of a general nature (used in the initial licensing examination) would not be included in subsequent mode endorsement qualification (upgrade) tests. Mode endorsements would be per the broad categories of code (AlA/A2A/FlA/F2A), facsimile (A3C/F3C/G3C) and pulse (PØNI), teletype (AlB/A2B/F1B/F2B/G1B/G2B), television (A3F/F3F/G3F, slow and fast scan), and voice (A3E/F3E/F8E/G3E/H3E/J3E/R3E). Existing code, voice, sstv, teletype, and similar band segments should be retained until (unless) activity indicates that reapportionments are advisable. Current license class (Novice through Extra) band segments should be eliminated.

In addition to earning additional operating privileges when one passes a mode upgrade test, she/he should be granted additional bands. As an example, the initial (one mode) license could authorize the use of that mode in assigned segments of the 160, 17, and 12 meter bands. The two-mode license (any two modes) could authorize the use of those two modes in assigned segments of the 80, 30, and 6 meter bands, in addition to the 160, 17, and 12 meter bands. Similarly, the three-mode license could authorize the use of all three modes in assigned segments of the 160, 80, 40, 30, 17, 12, 6, 2, and 1½-up bands. The four-mode license could add 10 and 15 meter privileges, and the five-mode license could add 20 meter operating privileges. In other words, each time an amateur passes a mode upgrade test, she/he expands operating privileges on the bands she/he was already authorized to use, and gains an additional band (or bands) in which those modes may be used.

The current Novice through Extra class licenses should be phased out. Each current Extra class licensee should receive a new license with all mode endorsements. Current Advanced and General licensees should receive new licenses with all but the facsimile/pulse endorsement. Present Technician and Novice licensees should receive two mode licenses authorizing code and voice operation. The figure shows end of 1988 licensing distribution. Call signs should be retained by existing licensees, and the existing call sign assignment system could be retained for future licensees. The present Group A (Extra), Group B (Advanced), Group C (General and Technician), and Group D (Novice) types of call signs could be used with 5, 4, 3/2, and 1 mode licenses, respectively.

The existing VEC program offers opportunities to implement on-the-air testing. It is reasonable to require applicants to prove basic knowledge and capability before authorizing (licensing) them to operate each of the different modes that are available to amateurs.

This is our chance to greatly improve the quality of future amateurs. Too many inactive license holders have been produced in the past. The addition of on-the-air operating tests should result in a significantly higher percentage of active licensees. The so-called "Novice Enhancement" has failed to produce the huge influx of new amateurs that was predicted by its supporters. In fact, it appears to have reduced interest in operating with the Novice license. I talk with Novices who come to our local club to be tested under the ARRL/VEC program. Almost without exception, they are not active on the air; they simply passed elements 1A

END-OF-DECEMBER 1988 440,311 TOTAL

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(5 wpm) and II (Novice written) as prerequisites to obtaining the Technician license. It is realistic to allow initial operation o_{X}^{N} voice, if that is what is desired, and to provide additional mode privileges as amateurs prove knowledge and capability to correctly use other modes.

I have no doubt that our Amateur Radio Service will deteriorate, if the code test requirements are eliminated without adding operating test requirements. The system detailed in this article is just intended to initiate discussions about adding real operating tests to our amateur radio operator licensing examinations. Your ideas could improve this suggested system. Quality is more important to amateur radio than any quantity of amateurs.

Bill Welsh - W6DDB

ARRL Charter Life Member
Recipient 1962 Edison Award
Recipient 1966 DeForest Award

BAND	· s / 7 /	TR LICE	msr)	ng nasar M	FOTAL PRIVILEGES
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z	.	80	30	6	/ Z
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4	•	15	10		44
5	7	Zo			60

MODES

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C	: C T	<i>:</i>	-	FRV
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<i>7</i> 9.	FCRV	5	:	Y (Voice

EX AMPLES

5 = ALL BANDS, ALL MODES 1-5 = 160/17/12 2, VOICE ONLY 3-P = 160/80/40/30/17/12/6/2/14-UP METERS, CODE/RTTY/VOICE